1,101,918

PATENT SPECIFICATION

DRAWINGS ATTACHED

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COMPLETE SPECIFICATION

Improvements in and relating to Pressurised Dispensing Devices

We, BESPAK INDUSTRIES LIMITED, a British Company, of Acos Works, Eleanor Cross Road, Waltham Cross, Hertfordshire, do hereby declare the invention for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

With pressurised containers of the type having a valve to control dispensing of the contents of the container, it is customary to provide an overcap which fits over the valve and protects it against inadvertent operation. The valve is provided with a dispensing nozzle and the usual procedure in preparing the containers for despatch is to fit the nozzle to the valve structure and then fit the overcap. This has the disadvantage of requiring two separate assembly operations, and to having to remove the overcap if it is desired to check that the correct nozzle has been fitted.

These disadvantages are overcome in accordance with the invention by forming the overcap structure as an integral moulding which includes an overcap proper and dispensing nozzle which is positioned externally of the overcap proper and is connected to it by a portion or portions of reduced cross-section which can be readily severed or broken so that the nozzle can be separated from the overcap proper without damage to either part.

In some cases, it is desirable that one container should serve for dispensing its contents through any one of a variety of different dispensing nozzles instead of providing a plurality of containers each having a nozzle suited to a particular purpose. One example is that of storage containers for filling gas-fuelled cigarette lighters. Different makes of lighter have different fuel inlet valves, each requiring a specially shaped nozzle for proper co-operation therewith, and the conventional practice is to produce containers differing only in the form of their outlet nozzles.

According to a further feature of the invention, the overcap structure includes a plurality of different nozzles each individually separable from the overcap proper.

With this arrangement, in the case of the storage container mentioned above, each can be provided with the same overcap structure which has nozzles suited to different makes of cigarette lighter, and it it left to the user to select the nozzle for his particular lighter.

Some consructional forms of the invention will now be described, by way of example only, with reference to the accompanying drawings, in which:—

Figures 1 and 2 are a sectional elevation and top plan view, respectively of an overcap structure;

Figures 3 and 4 are views corresponding to Figures 1 and 2 of a second embodiment; and

Figures 5 to 8 are sectional elevations of different dispensing nozzles.

The overcap structure shown in Figures 1 and 2 consists of an integral moulding of polythene or other synthetic plastics material including a tubular portion 1 having a circular flange 2 and three different dispensing nozzles 3, 4 and 5 each secured to the flange 2 by thin tongues 6 extending radially outwardly from the major diameter of the flange 2, which together with the tubular portion 1 constitutes the overcap proper. On the flange 2 adjacent the different nozzles is printed or embossed an identification symbol such as M, C and R by means of which each nozzle may be readily related to the particular make of cigarette lighter with which it should be used for filling purposes.

Although the individual nozzles are

[Price 4s. 6d.]

readily separable from the overcap proper by severing or breaking the tongues 6, they are so positioned that they can, if desired, be located over the co-operating valve without being detached from the overcap proper.

The overcap structure shown in Figures 3 and 4 is generally similar to that described above, but is illustrated as only having two nozzles 3, 4, each of which is located in a part circular recess 7 in the periphery of the flange 2, and is secured to that portion by thin circumferential tongues 6A. Further recesses 8 are provided so that the moulding dies are readily modified to form further nozzles in those recesses should the need arise.

The individual nozzles may of course take many different forms some of which are illustrated in Figures 5 to 8, of which Figures 5 to 7 are self-explanatory. The nozzle shown in Figure 8 has a main bore 11 connected by a smaller bore 12 to a counter bore 13 at the bottom of which is formed a diametrical slot 14 running into the smaller bore 12.

The overcap structures above described are intended for use with containers holding sufficient liquid butane or other gaseous fuel for multiple refilling of a cigarette lighter but it will be appreciated that the principle of providing a variety of nozzles with the overcap could be applied to the single-refill type of container. In this latter case, the valve may take the form of a seal which is ruptured when the appropriate nozzle is fitted and the container applied to the filling valve of the lighter.

The overcap structures may be used with containers that are pressureised by virtue of their contents being a gas in liquefied form or by reason of the inclusion of a propellant in the container contents or by reason of the operation of a pump associated with the container and operable to generate a pressure within such a container.

WHAT WE CLAIM IS :—

1. An overcap structure for a pressurised container of the type having a valve to control dispensing of the contents of the container, comprising an integral moulding including an overcap proper and a dispensing nozzle positioned externally of the overcap proper and connected to it by a portion or portions of reduced cross section which can readily be severed or broken so that the nozzle can be separated from the overcap proper without damage to either part.

2. An overcap structure in accordance with claim 1, comprising a plurality of different nozzles each individually separable from the overcap proper.

3. An overcap structure in accordance with claim 1 or 2, wherein the or each nozzle is so connected with the overcap proper that it can be located on the valve of the container with which it is intended to co-operate without being detached from the overcap proper.

4. An overcap structure in accordance with claim 1, 2 or 3, wherein the or each nozzle is connected to the overcap proper by a thin tongue extending radially outwardly from the major diameter of the overcap proper.

5. An overcap structure in accordance with claim 1, 2 or 3, wherein the or each nozzle is located in a recess in the periphery of the overcap proper.

6. An overcap structure substantially as herein described with reference to Figures 1 and 2, or Figures 3 and 4 of the accompanying drawings.

7. An overcap structure in accordance with any preceding claim wherein the or any one of the nozzles is in the form illustrated in any one of Figures 5 to 8 of the accompanying drawings.

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1 SHEET

COMPLETE SPECIFICATION

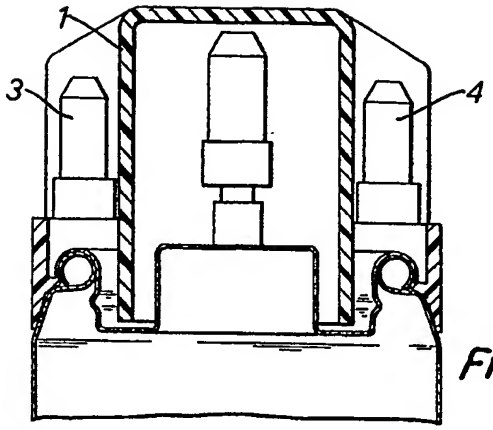

FIG. 3.

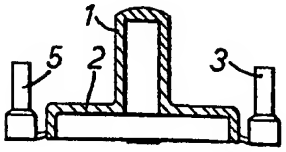

FIG. 1.

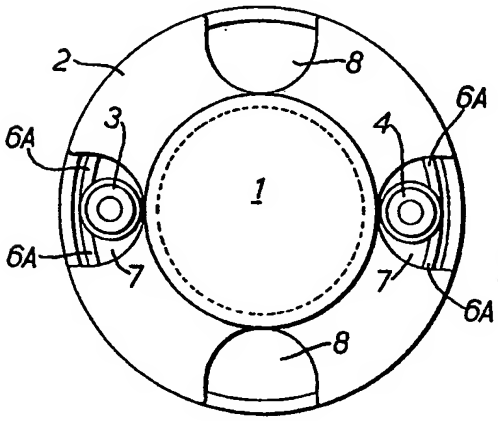

FIG. 4.

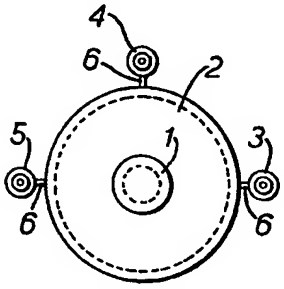

FIG. 2.

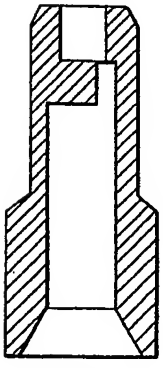

FIG. 5.

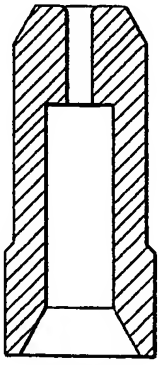

FIG. 6.

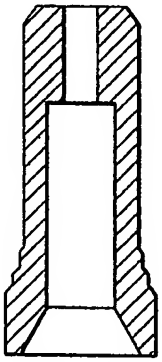

FIG. 7.

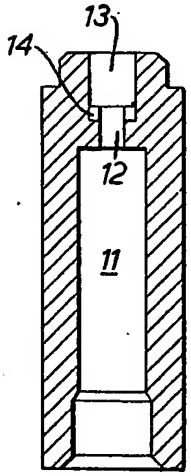

FIG. 8.